

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,480	09/29/2005	Vassili Timofeevitch Mikhaltsevitch	WRA0007-US	4928
7590 04/09/2007 Michael Bednarek Pillsbury Winthrop Shaw Pittman			EXAMINER	
			ARANA, LOUIS M	
1650 Tysons Boulevard McLean, VA 22102			ART UNIT	PAPER NUMBER
•		2859	2859	
SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		04/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
	10/518,480	MIKHALTSEVITCH ET AL.			
Office Action Summary	Examiner	Art Unit			
	Louis M. Arana	2859			
The MAILING DATE of this communication a					
• •	N V IO OET TO EVENE	ACMITUMO) OR THURTH (ON) RAVO			
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perior Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MO ute, cause the application to become A	ICATION. I reply be timely filed NTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 20	December 2004.				
	,—				
3) Since this application is in condition for allow	·	•			
closed in accordance with the practice under	Ex parte Quayle, 1935 C.I	J. 11, 453 O.G. 213.			
Disposition of Claims					
4) Claim(s) 17-31 is/are pending in the applicat 4a) Of the above claim(s) is/are withdr 5) Claim(s) is/are allowed. 6) Claim(s) 17-31 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and	rawn from consideration.				
Application Papers					
9)⊠ The specification is objected to by the Examin	ner				
10)⊠ The drawing(s) filed on <u>20 December 2004</u> is		☐ objected to by the Examiner.			
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the I	•				
Priority under 35 U.S.C. § 119					
12) ☒ Acknowledgment is made of a claim for foreign a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents. ☐ Certified copies of the priority documents. ☒ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the certified copies of the priority documents. ☐ Copies of the priority d	ints have been received. Ints have been received in Action to the control of the	Application No n received in this National Stage			
Attachment(s)					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) (s)/Mail Date			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 2/7/06.	5) Notice of 6) Other:	Informal Patent Application			

DETAILED ACTION

1. This communication is responsive to your preliminary amendment filed 12/20/04. Claims 17-31 are currently pending in this application. Claims 1-16 have been canceled.

Specification

2. The disclosure is objected to because of the following informalities: Paragraphs 2 and 3 of page 16 are the same.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 17-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al P.N. 6,208,136 (Smith).

Smith discloses a method and apparatus for Nuclear Quadrupole Resonance testing of a sample. Applicant's attention is directed to the description of the second variant of the second embodiment which description begins at line 60 of col. 22. Described therein is a multi-pulse sequence that consists of a combination of steady state free precession pulse sequences. The sequences are built on the principle of phase equivalence as described by Smith. In each of the pulse sequences there are at least two alternating phases. Note that the sequences may or may not include preparatory pulses. Note also

the equivalence of phase and frequency shifts as described by Smith. Also noteworthy is that Smith's pulse sequences are a modification according to the advanced principle of phase equivalence of a combination of PAPS and NPAPS sequences. Smith meets all the limitations of the claims at issue in their present form.

- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Magnuson et al. discloses a system for NQR detection, note the abstract of the disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis M. Arana whose telephone number is (571) 272-2236. The examiner can normally be reached on M-Thurs. Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2859

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

tŏuis M̃. Arana Primary Examiner Art Unit 2859

lma 3/27/07